

#### ABSTRACT

An apparatus serves to sense the absolute value of the rotational position of a shaft (14). The apparatus has a first single-turn rotary encoder (30) that is arranged at one end (20) of the shaft (14) and is arranged to sense the latter's rotational position within a single shaft revolution. Also provided are: a multi-turn rotary encoder unit which senses the number of revolutions of the shaft (14) and which comprises a reduction gear linkage (18); a rotary element (42), driven by the output of the linkage, that is oriented as an imaginary continuation of the shaft (14) and coaxially therewith; and a second single-turn rotary encoder (48) which is arranged to sense the rotational position of the rotary element (42) within a single revolution. The reduction gear linkage (18) surrounds the shaft (14), and its output element (38) is connected, via a connecting member (40), to said rotary element (42) around the first single-turn rotary encoder (30). An unusually compact combination motor/encoder unit can thereby be achieved, suitable for installation in small spaces, e.g. a few centimeters wide.